

REMARKS

Applicants have carefully reviewed and considered the Final Office Action mailed on May 4, 2005, and the references cited therewith.

Claims 1, 11, 22 and 33 are amended; as a result, claims 1-41 are now pending in this application. The amendments to claims 1, 11, 22, 33 are supported on page 26 line 2, and page 69 lines 24-26.

§ 103 Rejections of Claims

Claims 1, 2, 5-12, 16-22, 25, and 28 were rejected under 35 U.S.C. § 103(a) as being unpatentable over TUTTLE et al. (U.S. Patent 6,078,791) with a view to LITTLE (U.S. Patent 4,740,431). Applicants respectfully traverse, however applicants have amended claims 1, 11 and 22 to recite a flexible substrate to further distinguish the present claimed invention.

Examiner admitted that TUTTLE does not teach a first conductive layer deposited on the support structure and a thin-film battery deposited as successive thin-film depositions over at least a portion of the first conductive layer. LITTLE describes an integrated solar cell and battery deposited on a substrate (Abstract) that is glass (Column 4, lines 10-11). LITTLE does not describe nor suggest a flexible substrate.

A combination of TUTTLE and LITTLE would have the preassembled thin-film battery of LITTLE connected to the substrate of TUTTLE with conductive adhesive. It is impermissible to use the present application as a template to pick and choose selected features of LITTLE (i.e., successive deposition of thin-film battery layers on a substrate) into TUTTLE in place of what TUTTLE already does (i.e., to glue a thin-film battery in place on the substrate with antenna). There is nothing in TUTTLE that suggests depositing the battery as thin-film layers on to the substrate. There is nothing in little that suggests mounting an antenna on to the substrate that has the battery deposited as successive thin film layers. Accordingly, reconsideration and withdrawal of the rejection of claims 1, 2, 5-12, 16-22, 25, and 28, and an early indication of allowance is respectfully requested.

Further, regarding claims 5 and 16, the Examiner argues that since TUTTLE describes a flexible substrate that it is inherent that the flexible support member would inherently bend to

match a curved shape. Applicants respectfully traverse. The reference says the support member can be flexible, not that the resulting structure is or could be curved with the battery on the concave face. The battery and IC of TUTTLE is shown as a flat planar structure. The present claims 5 and 16 recite “a curved shape having a convex face and an opposing concave face, and the battery is curved and located on the concave face.” Accordingly, reconsideration and withdrawal of the rejection and an early indication of allowance is respectfully requested.

Further, regarding claims 6 and 17, the Examiner argues that since TUTTLE describes various modifications and changes may be made in the antenna configurations, battery arrangements and the like, that it would have been obvious to deposit the antenna on the battery. Applicants respectfully traverse. The reference says the antenna could be formed on the outer surface, not on the battery. It is impermissible for the Examiner to use hindsight gained from the present invention to extend TUTTLE’s ephemeral alternatives that do not even say place the antenna on the battery to include the recited combinations of claims 6 and 17 including the limitations of the independent claims 1 and 11. Regarding claims 7 and 18, TUTTLE shows the antenna around the outside of the IC, not on it. Regarding claims 8 and 19 these claims must be considered as a whole, including the base limitations of the independent claims, and appear to be allowable for the reasons argued above for the independent claims. Accordingly, reconsideration and withdrawal of the rejection and an early indication of allowance is respectfully requested.

Regarding claims 9 and 20, the Examiner again argues that Figure 9 of TUTTLE (which shows a “battery-less device environment, since it contains no battery therein”-column 10 line 43) somehow teaches recharging “the battery.” Applicants respectfully traverse. TUTTLE describes only a capacitor that is periodically charged by conventional RF charging circuits. This capacitor charge is not charge on a battery. Further, these claims must be considered as a whole, including the base limitations of the independent claims, and also appear to be allowable for the reasons argued above for the independent claims. Accordingly, reconsideration and withdrawal of the rejection and an early indication of allowance is respectfully requested.

Claims 3, 4, 13-15, 23 and 24 were rejected under 35 U.S.C. § 103(a) as being unpatentable over TUTTLE et al. (U.S. Patent 6,078,791) and LITTLE (U.S. Patent 4,740,431) with a view to KWAK et al. (U.S. Patent 6,280,875). Applicants respectfully traverse.

The Examiner has not addressed Applicant's argument that previously pointed out that they believe that KWAK et al., having a filing date of March 24, 1999, is unavailable for use as a 102(b)-103(a) reference against the present claims, since the present application claims priority to U.S. Provisional Application 60/191,774, filed March 24, 2000. U.S. Provisional Application 60/191,774, on its page 22, describes applications for its thin-film rechargeable batteries including implantable medical devices, remote sensors, miniature transmitters, smart cards, and MEMS devices. U.S. Provisional Application 60/191,774, on its page 25, describes the general layout and stacking order of its component films, including a thin-film cathode, anode, and an electrolyte film separating them. Since KWAK is not more than one year before the filing date of the provisional, and the provisional describes the devices and methods of the present claims, Applicants believe KWAK should be removed as a reference. Accordingly, reconsideration and withdrawal of the rejection and an early indication of allowance is respectfully requested.

Even if KWAK is not removed as a reference, in reference to Examiner's section 1 in the Office Action, these claims that depend on claim 1, 11, or 22 benefit from the amendments to claims 1, 11, and 22 that point out the battery as thin films deposited successively on the conductive layer on a flexible substrate, in contrast to the description in TUTTLE (column 9, lines 11-18), which says

“Referring now to FIG. 6B, a thin film battery consisting of parallel plates 84 and 86 is **placed** on base layer 78. Next, a capacitor comprising parallel plates 90 and 92 is **attached** onto battery layer 84 **using a conductive epoxy**. Bottom plate 92 of capacitor 62 is somewhat larger in lateral extent than top capacitor plate 90 in order to facilitate the necessary electrical connection of battery 60 and capacitor 62 to integrated circuit 96.”

Thus, TUTTLE forms the battery and capacitor and places or epoxies these devices on its substrate. Further, LITTLE deposits its thin films on a glass substrate (not flexible).

Thus, even though some layers in TUTTLE are deposited as thin films, the battery and capacitor are not, and TUTTLE does not suggest this. Combines with LITTLE, the glass-substrate battery of LITTLE would be placed on TUTTLE's thin-film substrate and connected with conductive epoxy.

In contrast, the present invention as claimed has each of the anode, electrolyte, and cathode component layers of the battery successively deposited as successive thin-film

depositions on the substrate. This distinguishes over the cited references. Accordingly, reconsideration and withdrawal of the rejection and an early indication of allowance is respectfully requested.

Regarding claims 23-24, these claims must be considered as a whole, including the base limitations of the independent claims, and also appear to be allowable for the reasons argued above for the independent claims. Accordingly, reconsideration and withdrawal of the rejection and an early indication of allowance is respectfully requested.

Claims 27-30 were rejected under 35 U.S.C. § 103(a) as being unpatentable over TUTTLE et al. (U.S. Patent 6,078,791) and LITTLE (U.S. Patent 4,740,431) and further in view to LEW et al. (U.S. Patent 6,608,464). Regarding claims 27 and 29, these claims must be considered as a whole, including the base limitations of the independent claims, and also appear to be allowable for the reasons argued above for the independent claims. Accordingly, reconsideration and withdrawal of the rejection and an early indication of allowance is respectfully requested.

Regarding claims 28 and 30, the Examiner provides no reference to an acoustic transducer, but instead states that LEW teaches a variety of sources. Applicants respectfully traverse. Applicants respectfully request under MPEP 2144 that the Examiner provide a reference in support of this rejection. Without such a showing for a *prima facie* case of obviousness, the claims appear to be in condition for allowance. Accordingly, reconsideration and withdrawal of the rejection and an early indication of allowance is respectfully requested.

§ 102 Rejection of Claims

Claims 33 and 41 were rejected under 35 U.S.C. § 102(b) as being anticipated by LITTLE (U.S. Patent 4,740,431). Applicants have amended claim 33 to recite a flexible substrate. LITTLE describes depositing a thin-film battery on a glass substrate, and does not describe nor suggest a flexible substrate. Accordingly, reconsideration and withdrawal of the rejection and an early indication of allowance is respectfully requested.

More § 103 Rejections of Claims

Claims 34-39 were rejected under 35 U.S.C. § 103(a) as being unpatentable over LITTLE (U.S. Patent 4,740,431) with a view to KWAK et al. (U.S. Patent 6,280,875). Applicants respectfully traverse. Applicants have amended claim 22 to recite a flexible substrate. LITTLE describes depositing a thin-film battery on a glass substrate, and does not describe nor suggest a flexible substrate. Accordingly, reconsideration and withdrawal of the rejection and an early indication of allowance is respectfully requested.

Claims 31, 32, and 40 were rejected under 35 U.S.C. § 103(a) as being unpatentable over LITTLE (U.S. Patent 4,740,431). Applicants respectfully traverse. The Examiner admitted that LITTLE does not teach a hearing aid, and has not provided any support for his assertion that it would have been obvious to one of skill in the art at the time of the invention to apply the IC of LITTLE as a hearing aid. Applicants respectfully submit that this unsupported assertion is insufficient to meet the Examiner's burden to show obviousness. It is impermissible to use the present application as a template to pick and choose selected features of LITTLE (i.e., successive deposition of thin-film battery layers on a glass substrate) with an Examiner's unsupported assertion as to hearing aids. Accordingly, reconsideration and withdrawal of the rejection and an early indication of allowance is respectfully requested.

Conclusion

Applicants respectfully submit that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicants' attorney (952-278-3501) to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 502931

Respectfully submitted,

HARLAN T. JACOBS ET AL.

By their Representatives,

LEMAIRE PATENT LAW FIRM, PLLC
P.O. BOX 11358
ST. PAUL, MN 55111
TELEPHONE: (952) 278-3500

Date

5 July 2005

By

Charles A. Lemaire

Charles A. Lemaire
Reg. No. 36,198

CERTIFICATE UNDER 37 CFR § 1.8: I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelop addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 5th day of July, 2005.

Name: Charles A. Lemaire

Signature: Charles A. Lemaire